TotalView

New Features

February 2005

version 6.7

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TotalView uses a modified version of the Microline widget library. Under the terms of its license, you are entitled to use these modifications. The source code is available at http://www.etnus.com/Products/TotalView/developers.

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New Features

This booklet contains information about changes made to TotalView for versions 6.6 and 6.7.

The information in this document is to let you know what changes have occurred. You'll find descriptions for all changes within the *TotalView Users Guide*.

TotalView has many features and it gives you a great number of tools for finding your program's problems. An easy way to get acquainted with these features is to subscribe to the "Tip of the Week". If you subscribe to this mailing list, you'll receive an email message every week that tells you something about TotalView.

- All of the tips are archived on our web site at **http://www.etnus.com/Support/Tips/index.html**.
- If you like what you see, you can subscribe at **http://www.etnus.com/mojo/mojo.cgi**.

New Platforms and Compilers

TotalView 6.6 and 6.7 adds support for the following platforms:

- Fedora Core 3 (6.7)
- IBM Power Linux systems running SuSE Linux Enterprise Server 9. (6.6)
- SuSe Linux Enterprise Server 9 update 1 (6.7)
- Intel em64t Linux systems running Red Hat and SuSE Linux. (6.6)

There are many changes to the compilers that TotalView supports at versions 6.6 and 6.7. In addition, there are changes to the operating systems versions that this release supports. You'll find details in the *TotalView Platforms Guide*.

New and Changed GUI Features

General Changes

This section looks at changes that have occurred within TotalView. Memory-related changes are described in "*Memory Debugging*" on page 2.

Tooltips

If you move the cursor over a variable or expression in the Process Window's Source Pane, TotalView displays its value in a window that it displays at the cursor. When you move the cursor, the tooltip window disappears. (6.6)

View > Padding Command

If you need to see padding characters added by your compiler to align data on word boundaries, select this command. (6.6)

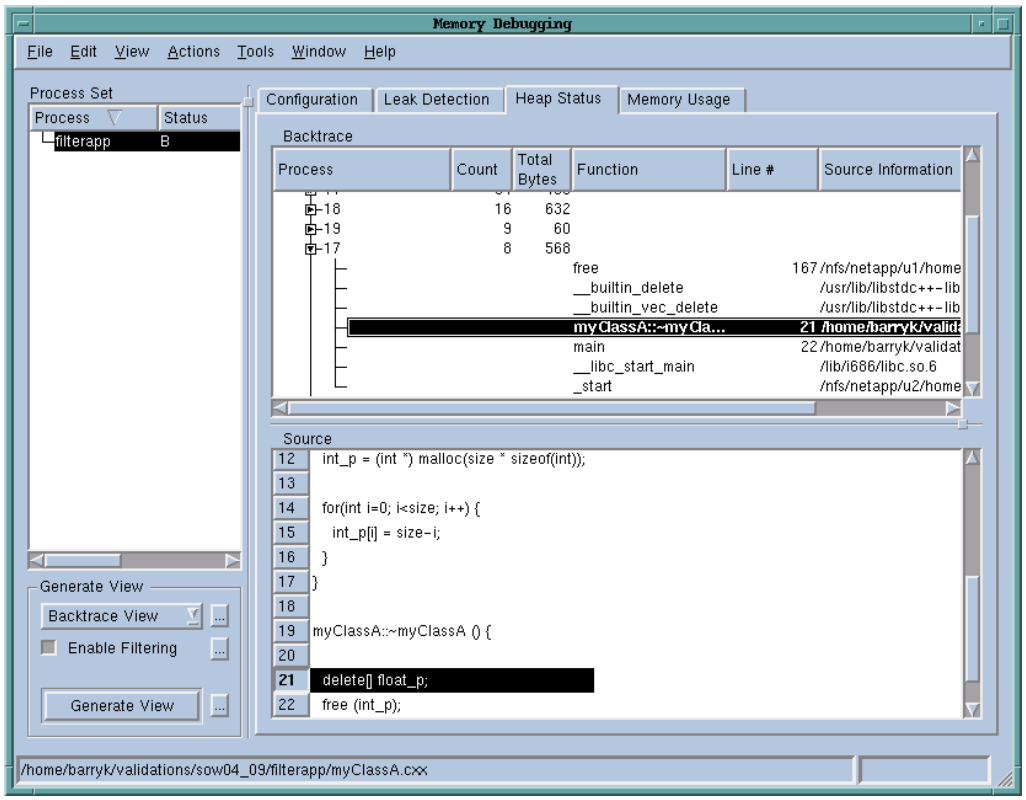
Wide Characters

If you are using wide characters, TotalView displays these characters using normal C language conventions. For more information, see *Viewing Built-in Types* and *Viewing Wide Character Arrays* (*<wchar> Data Types*) in Chapter 12 of the TotalView Users Guide. (6.6)

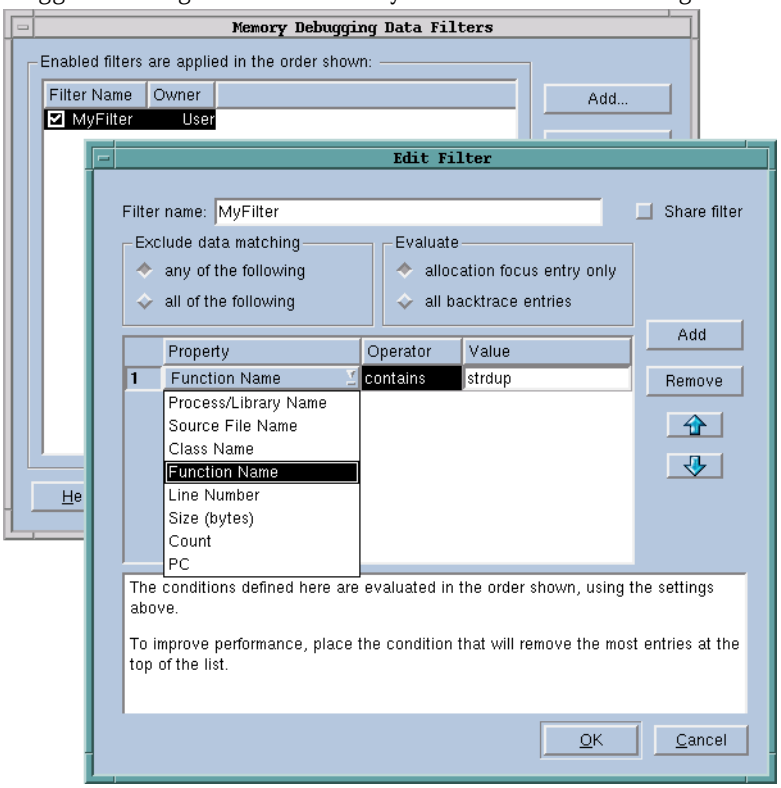
Memory Debugging

The changes that have occurred at Version 6.7 are:

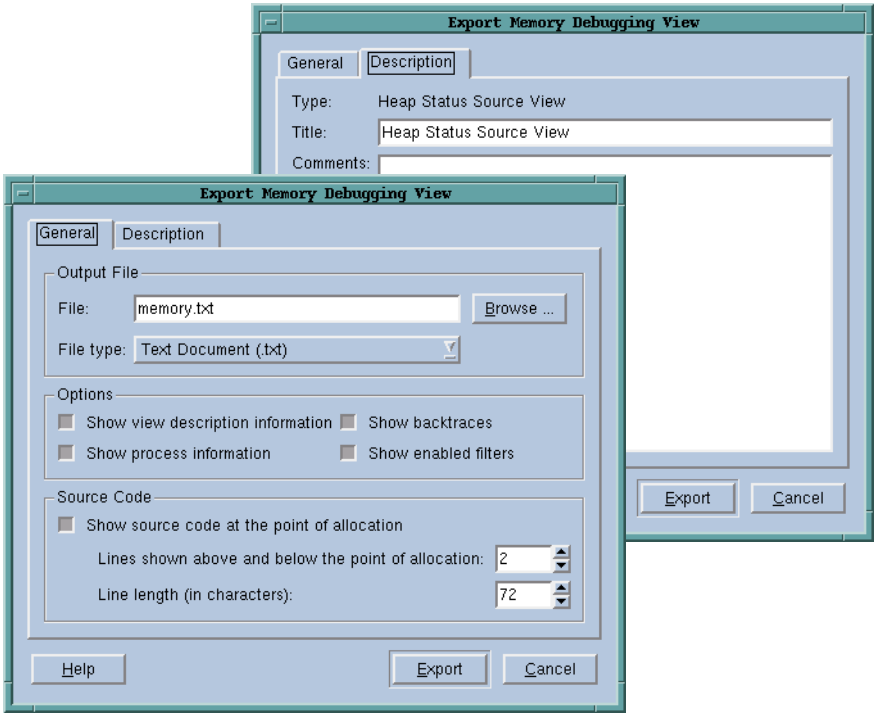
- If the Leak Detection or Heap Status Pages are selected, you can apply a filter to the displayed result using the **Enable Filtering** button.



- Selecting the ... button next to **Enable Filter** Button tells the Memory Debugger a dialog box that allows you to create and manage filters.

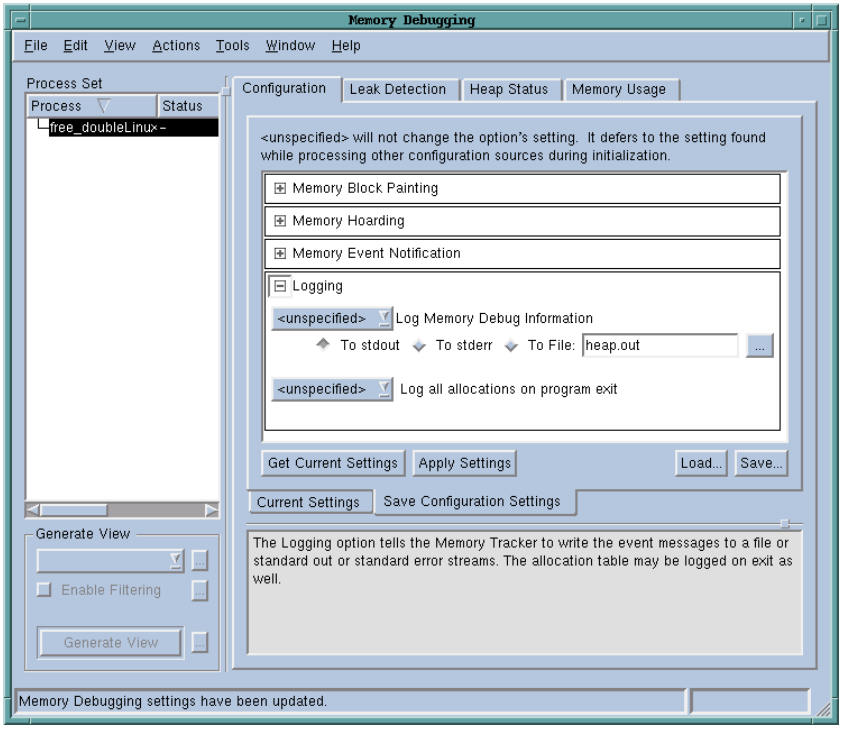


- You can now write the information created within most views by selecting the ... button that is next to the Generate View button.

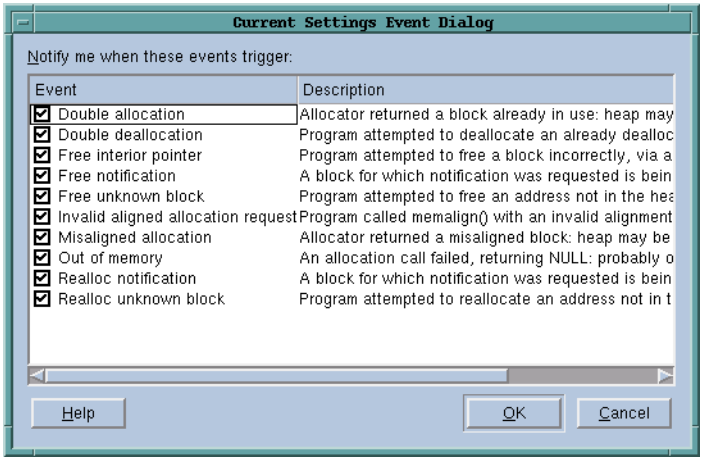


- The Configuration Page has two subtabs: Current Settings and Save Configuration Settings. When the Current Settings tab is selected, the information presented is similar to what it was in previous releases. When the

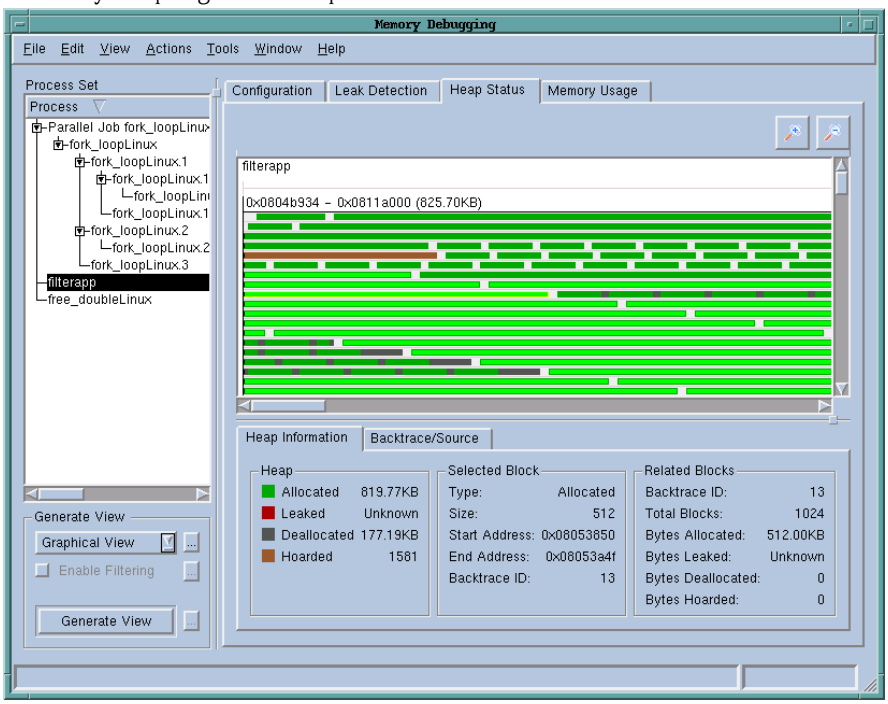
Save Configuration Settings tab is selected, you will see commands and controls that allow you to save, load, and apply saved Memory Debugger settings.



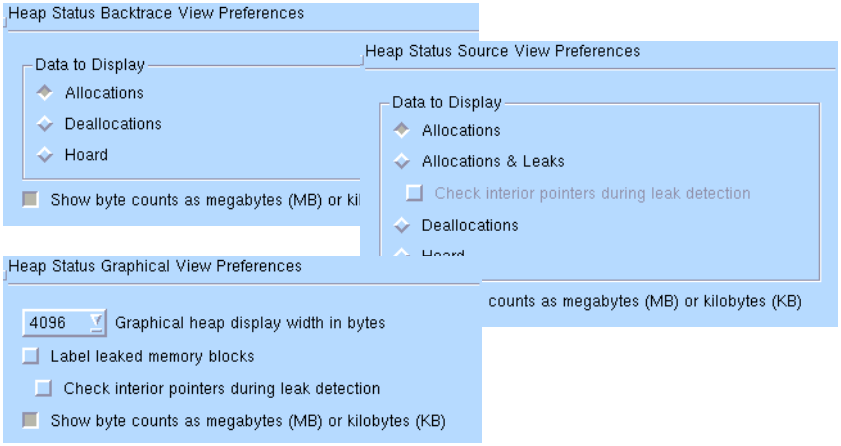
- Pressing the **Advanced** button within the **Event Notification** area of the Configuration Page lets you select the events for which you will receive notification.



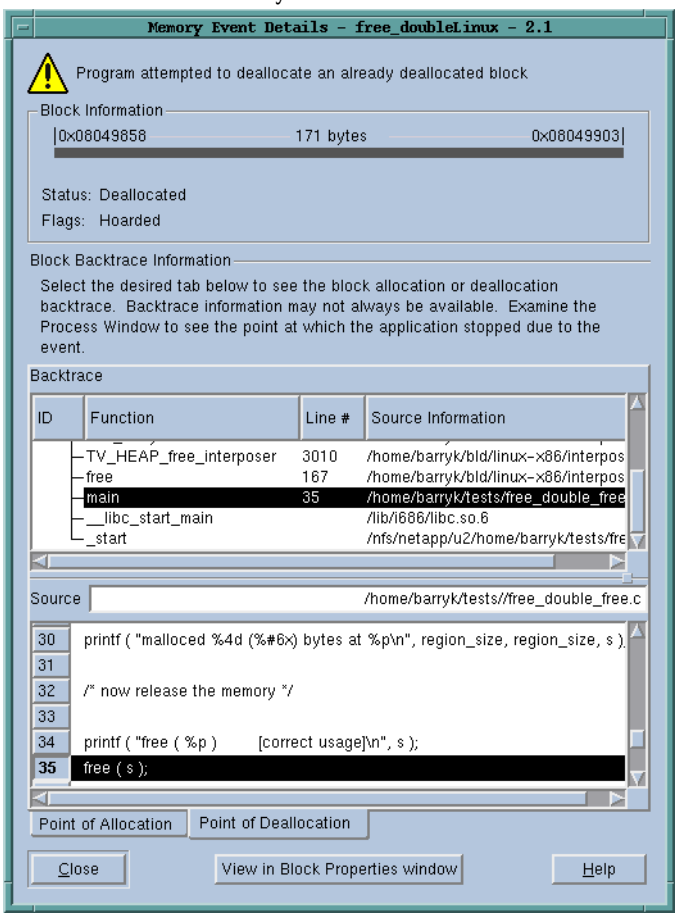
- The Heap Status Graphical View is added. This gives you a visual depiction of your program's heap.



- While view preferences have slightly changed for the Leak Detection and Memory Usage Pages, the preferences for the Heap Status Page are very different.

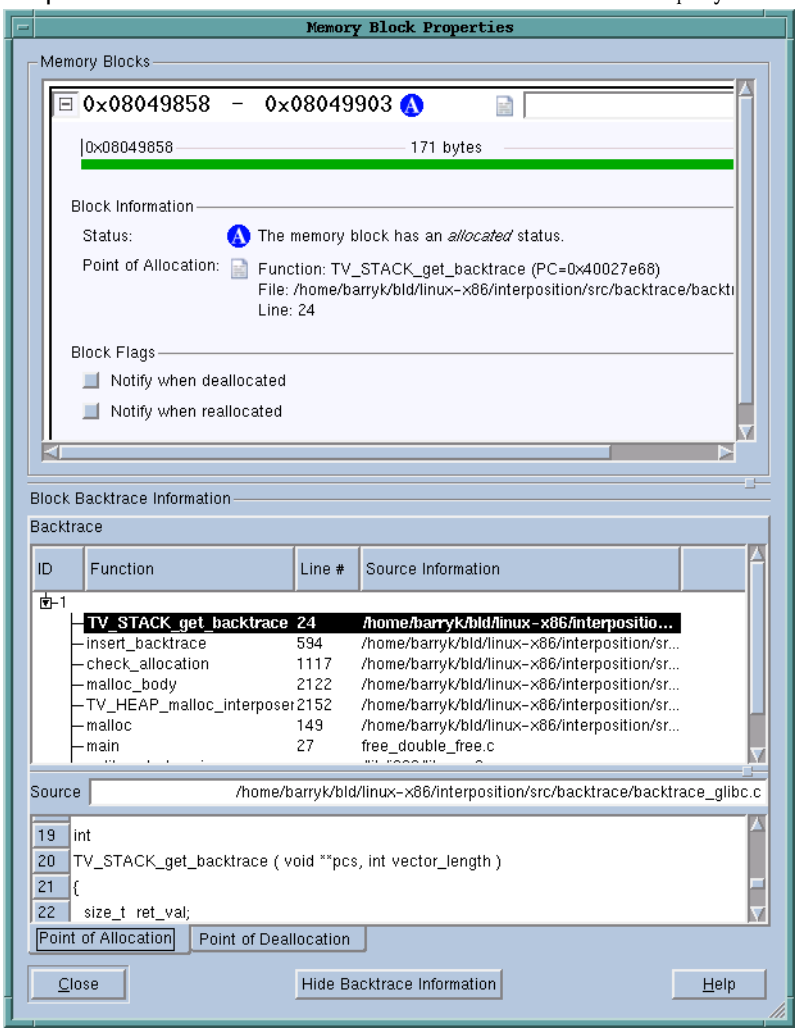


- The window that the Memory Debugger displays when a memory event occurs has been totally redone. Here is the new window.



If you close this window, you can redisplay it by selecting the **Tools > Memory Event Details** command within the Process Window. This command was previously called **Memory Error Details**.

- To display additional information, you can select the **View in Block Properties** button. Here's the window that TotalView displays:



The top area will give you some additional information.

You can directly display this window by selecting the Process Window's **Tools > Memory Block Properties** command.

- If you use the **Tools > Block Properties** command for a memory bock allocated within the heap, the Memory Debugger will watch and record the properties of this memory block. (You can also have TotalView watch blocks by right clicking in a Source View within the Memory Debugger or by right-clicing on a block in the Graphical View.) For these blocks, you can select the **Notify when deallocated** and **Notify when reallocated** buttons within the **Memory Block** area of the **Memory Block Properties** Window. When these buttons are selected, the Memory Debugger will display its **Memory Event Details** Window when either of these events occur